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THE WITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.

: 10/510,641

Applicant

: Khim Hong NG et al.

Filed/371 date

: March 4, 2005

TC/A.U.

: 2812

Examiner

Docket No. Customer No.

: 3225-103 : 06449

Confirmation No.

: 2900

# REQUEST FOR CORRECTED FILING RECEIPT

Director of the United States Patent and Trademark Office P.O. Box 1450 Alexandria, Virginia 22313-1450

Dear Sir:

Please issue a corrected filing receipt and Notice of Acceptance for the abovereferenced application. The Official Filing Receipt and Notice of Acceptance has the 371 date listed as October 8, 2004, however the declaration for this application was not filed until the second submission dated March 4, 2005. Therefore the 371/Date of Acceptance should be March 4, 2005 when all requirements under U.S.C. 371 (c)(1), (2) and (4) were met.

Copies of the previously filed transmittals (PTO-1390), and post card receipts of each submission are enclosed. Also enclosed are copies of the filing receipt and notice of acceptance documents with the corrections to be made marked in ink for your reference.

Respectfully submitted,

By

G. Franklin Rothwell **Attorney for Applicants** Registration No. 18,125

ROTHWELL, FIGG, ERNST & MANBECK, p.c.

Suite 800, 1425 K Street, N.W.

Washington, D.C. 20005 Telephone: (202)783-6040



TENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Dox 1450 Alexandria, Vinginia 22313-1450 www.unpto.gov

FILING OR 371 ART UNIT FIL FEE REC'D ATTY.DOCKET NO APPL NO. **DRAWINGS** TOT CLMS IND CLMS (c) DATE 10/510.641 -1<del>0/08/2004-</del> 2812 1206 3225-103 5 25

63/04/2005

**CONFIRMATION NO. 2900** 

**FILING RECEIPT** 

OC000000015256193\*

6449 ROTHWELL, FIGG, ERNST & MANBECK, P.C. 1425 K STREET, N.W. SUITE 800 WASHINGTON, DC 20005

Date Mailed: 03/01/2005

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Filing Receipt Corrections, facsimile number 703-746-9195. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

## Applicant(s)

Khim Hong Ng, Singapore, SINGAPORE; Yeow Keong Ng, Singapore, SINGAPORE: Kar Hwee Koh, Singapore, SINGAPORE:

## **Assignment For Published Patent Application**

Systems on Silicon Manufacturing Co. PTE. LTD., Singapore, SINGAPORE

Power of Attorney: The patent practitioners associated with Customer Number 6449.

#### Domestic Priority data as claimed by applicant

This application is a 371 of PCT/SG03/00011 01/20/2003

Foreign Applications

Projected Publication Date: 06/02/2005

Non-Publication Request: No

Early Publication Request: No

BOTHY 四十二十二二 END PHOS HAT.

MAR - 4 2005

Title

Titanium underlayer for lines in semiconductor devices

**Preliminary Class** 

438

# LICENSE FOR FOREIGN FILING UNDER Title 35, United States Code, Section 184 Title 37, Code of Federal Regulations, 5.11 & 5.15

#### **GRANTED**

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Office of Export Administration, Department of Commerce (15 CFR 370.10 (j)); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

## **NOT GRANTED**

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).



# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Dox 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

U.S. APPLICATION NUMBER NO. FIRST NAMED APPLICANT ATTY. DOCKET NO. 10/510,641 Khim Hong Ng 3225-103

INTERNATIONAL APPLICATION NO.

PCT/SG03/00011

6449 ROTHWELL, FIGG, ERNST & MANBECK, P.C. 1425 K STREET, N.W. SUITE 800 WASHINGTON, DC 20005

I.A. FILING DATE PRIORITY DATE 01/20/2003

**CONFIRMATION NO. 2900 371 ACCEPTANCE LETTER** 

OC0000000152561941

Date Mailed: 03/01/2005

## NOTICE OF ACCEPTANCE OF APPLICATION UNDER 35 U.S.C 371 AND 37 CFR 1.495

The applicant is hereby advised that the United States Patent and Trademark Office in its capacity as a Designated / Elected Office (37 CFR 1.495), has determined that the above identified international application has met the requirements of 35 U.S.C. 371, and is ACCEPTED for national patentability examination in the United States Patent and Trademark Office.

The United States Application Number assigned to the application is shown above and the relevant dates are:

03/04/2005

03/64/2005 10/08/2004-

DATE OF RECEIPT OF 35 U.S.C. 371(c)(1), (c)(2) and (c)(4) REQUIREMENTS

DATE OF COMPLETION OF ALL 35 U.S.C. 371 REQUIREMENTS

A Filing Receipt (PTO-103X) will be issued for the present application in due course. THE DATE APPEARING ON THE FILING RECEIPT AS THE "FILING DATE" IS THE DATE ON WHICH THE LAST OF THE 35 U.S.C. 371 (c)(1), (c)(2) and (c)(4) REQUIREMENTS HAS BEEN RECEIVED IN THE OFFICE. THIS DATE IS SHOWN ABOVE. The filing date of the above identified application is the international filing date of the international application (Article 11(3) and 35 U.S.C. 363). Once the Filing Receipt has been received, send all correspondence to the Group Art Unit designated thereon.

The following items have been received:

- Copy of the International Application filed on 10/08/2004
- Copy of the International Search Report filed on 10/08/2004
- Copy of IPE Report filed on 10/08/2004
- Preliminary Amendments filed on 10/08/2004
- Information Disclosure Statements filed on 10/08/2004
- -Oath or-Declaration filed on 10/08/2004
- Request for Immediate Examination filed on 10/08/2004
- U.S. Basic National Fees filed on 10/08/2004
- Assignment filed on 10/08/2004
- Power of Attorney filed on 10/08/2004

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

LAMONT M HUNTER
Telephone: (703) 308-9140 EXT 201

PART 1 - ATTORNEY/APPLICANT COPY

FORM PCT/DO/EO/903 (371 Acceptance Notice)

Description	No.		Description				
	2	X	Copy of Published Int'l application	24			
Form PTO-1390	+	<del>  ^</del> -	Copy of PCT Request				
Inventor(s) Declaration	+,	<b>∤</b>	Copy of PCT Demand				
Information Disclosure Statement (IDS)	++-	╫──	Copy of International Prelia Exam Rot (NER)				
PTO 1449 w/ 1 encl.		╂──	Copy of PCT/IN/301				
Copy of International Search Report (ISR)		<b>}</b> -					
Assignment & Recordation Cover Sheet		<b>}─</b> ─					
	_	<del></del>					
Preliminary Amendment	+-	╂──	861				
Substitute Specification w/ marked and clean copy	1 30 2	╬───	12. 5				
Application as filed K	+31.	╬┈┈		<u> </u>			
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ASSIGNMENT RECORDATION FEE PAID: \$	<u> 540.00</u>		7.1 0.1.2.2.				
IN RECARD TO							
ATTORNEY DOCKET NO.: 3225-103 ATTORNEY/ASSISTANT: GFR:vjm							
T NAMED DIVENTOR: NG et al							
FIRST-NAMED HAVEN FOR LINES IN SEMICONDUCTOR DEVICES							
FILED: January 20, 2003 V							
INTERNATIONAL APPLICATION NO.: PC1/302005/10000111							
				•			
	ASSIGNMENT RECORDATION FEE PAID: SI III III III III III III III III III	Information Disclosure Statement (IDS)  PTO 1449%/I encl. / 1 Copy of International Search Report (ISR) / 3 Assignment & Recordation Cover Sheet / 2 Application Data Sheet / 2 Preliminary Amendment / 6 Substitute Specification w/ marked and clean copy / 3  APPLICATION FILING/CLMS FEES PAID: \$40.00 IN REG ORNEY DOCKET NO.: 3225-103  ORNEY DOCKET NO.: 3225-103  FITANIUM UNDERLAYER FOR LINES IN SEMICATION S	Information Disclosure Statement (IDS)  PTO 1449%/1 encl. / 1  Copy of International Search Report (ISR) / 3  Assignment & Recordation Cover Sheet / 2  Application Data Sheet / 2  Preliminary Amendment / 6  Substitute Specification w/ marked and clean copy / 3  APPLICATION FILING/CLMS FEES PAID: \$40.00  IN REGARD  ORNEY DOCKET NO.: 3225-103	Copy of PCT Demand   Copy of PCT Demand   Copy of PCT Demand   PTO 1449%/ 1 encl. /			

FORM PTO-1390		U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No.				
TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371		3225-103					
		U.S. Application No. (if known, see 37 CFR 1.5)					
		New Application					
INTERNATIONAL AI PCT/SG2003/00		PRIORITY DATE CLAIMED					
TITLE OF INVENTION TITANIUM UNDE		JES IN SEMICONDUCTOR DEVICES					
APPLICANT(S) FOR I		G and Kar Hwee KOH					
Applicant herewith su	omits to the United Sta	ates Designated/Elected Office (DO/EO/US) th	e following items and other information:				
1. [X] This is a	FIRST submission of	items concerning a filing under 35 U.S.C. 371					
2. [ ] This is a	SECOND or SUBSEC	QUENT submission of items concerning a filin	g under 35 U.S.C. 371.				
3. [ ] This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.							
4. [ ] The US h	as been elected (Artic	le 31).					
<ul> <li>5. [X] A copy of the International Application as filed (35 U.S.C. 371(c)(2))</li> <li>a. [X] is attached hereto (required only if not communicated by the International Bureau).</li> <li>b. [] has been communicated by the International Bureau.</li> <li>c. [] is not required, as the application was filed in the United States Receiving Office (RO/US)</li> </ul>							
6. [ ] An Englis a. [ ] b. [ ]							
<ul> <li>7. [X] Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))</li> <li>a. [] are attached hereto (required only if not communicated by the International Bureau).</li> <li>b. [] have been communicated by the International Bureau.</li> <li>c. [X] have not been made; however, the time limit for making such amendments has NOT expired.</li> <li>d. [] have not been made and will not be made.</li> </ul>							
8. [ ] An Englis	8. [ ] An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).						
9 An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).							
<ol> <li>An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).</li> </ol>							
ITEMS 11. TO 20. below concern other document(s) or information included:							
12. [X] An assign 13. [X] A prelimir 14. [X] An Applic 15. [] A substitu 16. [] A power of	<ul> <li>12. [X] An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.</li> <li>13. [X] A preliminary amendment.</li> <li>14. [X] An Application Data Sheet under 37 CFR 1.76.</li> <li>15. [] A substitute specification.</li> </ul>						
18. [ · ] A second 19. [ ] A second 20. [X ] Other item	A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821-1.825  A second copy of the published international application under 35 U.S.C. 154(d)(4).  A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).  Other items or information:  Copy of Published International Application (24 pgs.)						

U.S. APPLICATION NO. (If known, New Application	S. APPLICATION NO. (If known, see 37 CFR 1.50)  EW Application  INTERNATIONAL APPLICATION NO. PCT/SG2003/000011			ATTORNEY DOCKET NO. 3225-103		
21. [X] The following fee Basic National Fee (37 (Neither international prelimor international search for International Preliminary but International Preliminary but international preliminary but international preliminary but claims did not satisfy International preliminary and all claims satisfied pr	CALCULATIONS	PTO USE ONLY				
	EN'	TER APPROPRIATE BAS	SIC FEE AMOUNT =	\$ 1,080.00		
Surcharge of \$130.00 for fur months from the earliest clai			20 [ ] 30	\$		
Claims	Number Filed	Number Extra	Rate		т	
Total Claims	27 -20 =	7	X \$18.00	\$ 126.00		
Independent Claims	2 - 3 =	0	X \$86.00	\$ 0		
Multiple dependent claim(s)	) (if applicable)		+ \$290.00	\$		
		TOTAL OF ABOVE CA	ALCULATIONS =	\$ 1206.00		
Applicant claims small above are reduced by 1	\$					
			SUBTOTAL =	\$		
Processing fee of \$130.00 fo months from the earliest claim	\$					
		TOTAL N	ATIONAL FEE =	\$40.00 ·		
Fee for recording the enclose accompanied by an appropria				\$		
		TOTAL FE	ES ENCLOSED =	\$ 1246.00		
		Amount to be refunded	\$			
				charged	\$	
<ul> <li>a. X A check in the amount of \$1206.00 and 40.00 to cover the above fees is enclosed.</li> <li>b. Please charge my Deposit Account No. 02-2135 in the amount of \$ to cover the above fees. A duplicate copy of this sheet is enclosed.</li> <li>c. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 02-2135. A duplicate copy of this sheet is enclosed.</li> <li>NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.</li> </ul>						
	SEND ALL CORRESPONDENCE TO:  Signature					
Customer No. 6449  G. Franklin Rothwell	ell					
Rothwell, Figg, Ernst & Manbec 1425 K St., N.W. Washington, D.C. 20005 Phone: 202/783-6040	<del>ग</del>					

Æ

FORM I	PTO-1390 U.S. Department of Commerce Pater	Attorney's Docket No.						
	TRANSMITTAL LETTER	3225-103						
	DESIGNATED/ELECT CONCERNING A FILI	U.S. Application No. (if known, see 37 CFR 1.5)						
		10/510,641						
INTER PCT/	RNATIONAL APPLICATION NO. SG03/000011	PRIORITY DATE CLAIMED						
	TITLE OF INVENTION TITANIUM UNDERLAYER FOR LINES IN SEMICONDUCTOR DEVICES							
APPLI Khim	CANT(S) FOR DO/EO/US Hong NG et al.							
Applica	ant herewith submits to the United Sta	tes Designated/Elected Office (DO/EO/US) th	ne following items and other information:					
1.		as concerning a filing under 35 U.S.C. 371	government information.					
2. X	This is a SECOND or SUBSEQUE	ENT submission of items concerning a filing t	ınder 35 U.S.C. 371.					
3.	This is an express request to begin (5), (6), (9) and (21) indicated b	national examination procedures (35 U.S.C. 3 elow.	71(f)). The submission must include items					
4.	The US has been elected (Article 3	1).						
A copy of the International Application as filed (35 U.S.C. 371(c)(2))  a.  is attached hereto (required only if not communicated by the International Bureau).  b.  has been communicated by the International Bureau.  c.  is not required, as the application was filed in the United States Receiving Office (RO/US)								
6.								
Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))  a. \( \) are attached hereto (required only if not communicated by the International Bureau).  b. \( \) have been communicated by the International Bureau.  c. \( \) have not been made; however, the time limit for making such amendments has NOT expired.  have not been made and will not be made.								
8.	8. An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).							
9. X An oath or declaration of the inventor(s) (35 U-S.C. 371(c)(4)).								
An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).								
ITEMS 11. TO 20. below concern other document(s) or information included:								
11.	An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.  A preliminary amendment.  A Supplemental Application Data Sheet under 37 CFR 1.76.  A substitute specification.							
17.	A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821-1.825  A second copy of the published international application under 35 U.S.C. 154(d)(4).  A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).  Other items or information:  [] RO/101 [] RO/105 [] ISA/210(ISR) [] IB/301 [] IB/304 [] IB/308 [] IB/401 [] IR/400(IBER)							
	[] IB/416 [] Published Application WO/							

U.S. APPLICATION NO. (If known, see 37 CFR 1.50) 10/510, 641 The following fees are submitted:		INTERNATIONAL APPLICATION NO. PCT/SG03/000011			ATTORNEY DOCKET NO. 3225-103		
21. Basic	21. Basic National Fee\$300.00			\$			
22. Examination Fee If International Preliminary Examination Report prepared by USPTO and all claims satisfy provisions of PCT Article 33(1) – (4)					s		
International S	CFR 1.445(a onal Searchir Search Report	prepare and provide	n the international applic	•••••	\$100.00		
			TOTAL	OF	21,22 and 23=	\$	
Additional sequence li \$250 for ea	fee for special sting or comp ach additional	fication and drawings outer program listing 50 sheets of paper or	filed in paper over 100 s. filed in an electronic med a fraction thereof.	neet ium	s (excluding ). The fee is	\$	
Total Sheets	Extra Shee	Number of eac	h additional 50 or fractio up to a whole number)	n	RATE		
- 100=	/50				X 250.00		
earnest crai	med priority	date (37 CFR 1.492(e	··	0 m	onths from the	\$130.00	
Claims '		Number Filed	Number Extra	R	ate		
Total Claims		-20 =		х	\$50.00	s	
Independent C	laims	- 3 =		х	\$200.00	\$	
Multiple depen	dent claim(s)	(if applicable)		+	\$360.00	\$	
		Т	OTAL OF ABOVE CA	LC		\$	
Applicant cl above are re	aims small eneduced by 1/2	ntity status. See 37 Cl	FR 1.27. The fees indica	ted			
					UBTOTAL =	\$	
Processing fee o	f \$130.00 for	furnishing the Englis	sh translation later than 3			\$	
the earliest clain	ned priority d	ate (37 CFR 1.492(f))	).	0 111	+	\$	
	·				ONAL FEE =	\$	
Fee for recording accompanied by	g the enclosed an appropria	d assignment (37 CFR te cover sheet (37 CF)	1.21(h)). The assignme R 3.28, 3.31). \$40.00 pe	nt m	ust be operty +	\$	
			TOTAL FEE	SE	NCLOSED =	\$130.00	
				_		Amount to be refunded	\$
a. 🛛 A check						charged	\$
b. Please of A duplic	charge my De cate copy of the nmissioner is	posit Account No. 02 his sheet is enclosed. hereby authorized to	ver the above fees is encl -2135 in the amount of \$ charge any additional fee cate copy of this sheet is		to cover		overpaymer
NOTE: Where a	an appropria	ite time limit under 3	For CFR 1.494 or 1.495 hoplication to pending sta	1	ov been met, a p	petition to revive (	67 CFR 1.1.
END ALL CORI	RESPONDE		Signat	<i>//</i> X	Duo	12 lly	wesh
homas E. McKierns othwell, Figg, Erns 425 K St., N.W. /ashington, D.C. 20	t & Manbeck		· Name		E. McKiernan		
hone: 202/783-6040	)			889	n Number		

Rothwell, Figg, Ernst & Manbeck, 1425 K St NW, Ste 800, Wash, DC 20005(202-783-6040)

#### PAT-PTO RECEIPT

TO BE DATE-STAMPED BY THE U.S. PATENT AND TRADEMARK OFFICE AS ACKNOWLEDGMENT OF RECEIPT BY IT OF THE FOLLOWING:

PTO-1390, Declaration (4 pages), Supplemental Application Data Sheet (2 pages)

X FEE(S) PAID: 130.00	X CHECK V	DEP ACCT 02-2135

ATTORNEY DOCKET NO.: 3225-103 / SERIAL NO.: 10/510,641 / PATENT NO.:

FIRST-NAMED INVENTOR: NG et al.

ATTORNEY/ASSISTANT: GFR:vjm DUE DATE:

MAR E 1 2005 E

Date-Stamp Here

54.12